



Chief Editor: Elsie Davis

November - December 2015



RD's Corner

Happy December, everyone! This season of the year marks both a beginning and an ending

for us in the Southeast Region. It's the beginning of a cherished time of celebration with those we love—good food, visits from family and friends, and trips out of town to recreate in warmer—or colder—locales. At the same time, the holiday season heralds the ending of another great year together. We look back with pride on all that we have accomplished in carrying out our mission. We have conserved fish and wildlife in an amazing diversity of habitats, from the beaches of Puerto Rico and the Atlantic coast to the wetlands of Louisiana, the rivers of Arkansas, and the mountains of North Carolina. Holiday season beginnings and endings have one thing in common—people and what they mean to us.

Tending to the people side of what we do is a high priority for me and the other members of your Regional Directorate Team (RDT). As we close out this year, we just wrapped up our annual pulse check survey that gives you the opportunity to have your say on how things are going in key areas of organizational life. Results from this anonymous survey will be available early next year, and you will hear directly from me on the feedback you provide. I want to express a big “Thank you!” to the 635 employees who took the time to complete the survey.

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Study finds Kemp's ridley most at risk among Gulf species

By Nadine Siak, Gulf Restoration Program

While it is said, “change is the law of life,” there is considerable concern that accelerated sea-level rise, changing climate and increased urbanization are going to have major negative impacts on coastal landscapes and species along the Gulf of Mexico. A recently released Service-affiliated report that evaluates the vulnerability of four key ecosystems and 11 associated species concludes tidal emergent marsh and Kemp ridley sea turtles are the most vulnerable to these emerging threats.

The Gulf Coast Vulnerability Assessment (GCVA) is a Gulf-wide initiative to identify and assess habitat and species vulnerabilities in a consistent manner across the Gulf of Mexico coast. Based on the expert opinions of managers, scientists, administrators and others, the report takes into account an ecosystem's or species' sensitivity to projected changes, the magnitude and rate of exposure, ecological responses, and the ability of habitats and species to adapt to change.



Kemp's ridley sea turtle, photo: USFWS

Tidal emergent marshes are submerged at least partially by tidally-influenced water; the ground is high enough (not flooded too deeply for too long) to support emergent herbaceous plants, but too low and wet to support trees or shrubs. These marshes are important foraging grounds for raptors and waterfowl, and provide essential nursery habitat for aquatic life. According to the GCVA, tidal emergent marsh is more vulnerable than mangrove, oyster reef and barrier island ecosystem to projected climate and land use changes. Several factors contribute to marsh vulnerability including land subsidence and erosion, low soil accretion rates, sea level rise, and the inability to migrate inland due to man-made barriers.

The Kemp's ridley sea turtle is classified as the most vulnerable species among those assessed primarily due to loss of nesting habitat to sea level rise, erosion, and urbanization. Kemp's ridleys also have an overall low adaptive capacity score due to their low genetic diversity, and higher nest site fidelity as compared to the other species. The other species

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Recently, we held a listening session at Alligator River National Wildlife Refuge with a cross-section of employees from stations in that vicinity. I reminded employees that from the RDT's perspective, candid feedback respectfully delivered is a gift. It was helpful, for example, to get employee feedback at the Alligator River session on what's working and what isn't in regard to employee Individual Development Plans. Your career development is essential to both of our success, so efforts are already underway to improve that area of our organizational life. The bottom line is: we as a region can't fix what we don't know is broken. We also need to know what we are doing right so we can do more of it. Your RDT commits to being equally forthright in giving you our perspective on issues of collective concern.

The other people that we remember and appreciate at this time of year are our partners, including those in state, federal and local governments, and NGOs. The Southeast Region had a good showing at the Southeastern Association of Fish and Wildlife Agencies' 69th annual conference held last month in Asheville, North Carolina. The theme was "Conserving Large Landscapes," and the message contained in that theme expresses a truth we in the conservation community are embracing: We must work together at the landscape scale with our partners to achieve the conservation of our Region's and our nation's fish and wildlife resources. More than 800 individuals came together at this meeting to exchange ideas and perspectives on how to collectively address our shared challenges and the opportunities to do more together than any of us could do on our own.

If there is one word that describes how we in the Southeast Region need to work to be successful internally and externally in the 21st century, that word is interdependence. We are all in this together. When it comes to solving problems, addressing challenges, or exploring new opportunities in our organization or in our mission accomplishment, we all have a part to play. No part of the organization is dispensable. All our skills, talents, and creativity, and those of our partners, are needed to achieve our goals.

I wish each of you a wonderful holiday season with friends and family. I look forward to all that we will continue to do together, working interdependently on a conservation mission that is worthy of our shared, heartfelt commitment. ♦

- *Cindy*

Kemp's Ridley continued...

assessed are roseate spoonbill, blue crab, clapper rail, mottled duck, spotted seatrout, Eastern oyster, American oystercatcher, red drum, black skimmer, and Wilson's plover.

The GCVA is a collaborative effort spearheaded by the four Landscape Conservation Cooperatives (LCCs) – the Gulf Coast Prairie, the Gulf Coastal Plains & Ozarks, the South Atlantic and the Peninsular Florida – that cover the Gulf of Mexico. The LCCs are partnerships among federal agencies, states, tribes, non-governmental organizations, universities, and other entities that collaboratively address broad-scale conservation issues in a defined geographic area. They received support and guidance for the GCVA from many partners, including the Service, the National Oceanic and Atmospheric Administration, the Northern Gulf Institute, the Gulf of Mexico Alliance, the Louisiana Coastal Protection and Restoration Authority, and the United States Geological Survey (USGS).

The GCVA will help guide future conservation and restoration efforts by assisting conservation partners across the Gulf – including the Service – identify vulnerable areas where they can most effectively focus resources. In addition, the document identifies areas where additional research is needed to better anticipate impacts to coastal ecosystems and species along the northern Gulf of Mexico.

"We know that change is inevitable," says John Tirpak, Science Coordinator for the Service's Gulf Restoration Program, "yet understanding the relative magnitude of that change across the landscape and among our trust resources allows us to not have to blindly accept our fate, but rather shape our future. The GCVA provides us a glimpse into our potential future that we can use to help us strategize our next best steps." ♦

What's Trending



Apps: Looking to improve your outdoor survival skills? Knot Guide currently features 103 different

knots and is the #1 knot app on iTunes. It's the "Weekend Warriors DIY" pick. The App provides step by step instructions for each knot, and breaks down knot categories and lingo.

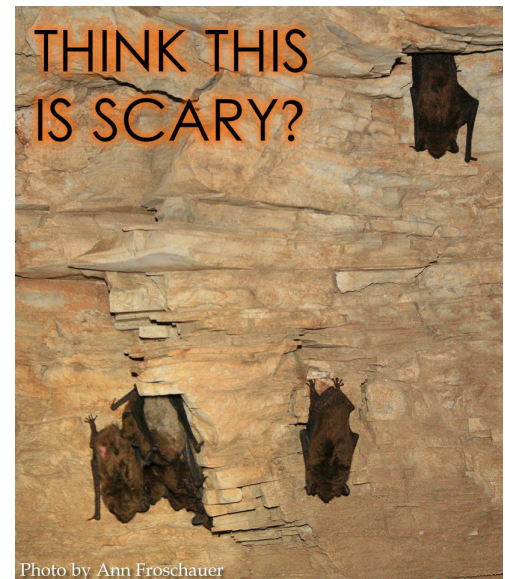


Photo by Ann Froschauer

#MostSharedStory: To celebrate #BatWeek (October 25-31) we demonstrated that even though some folks might think bats are scary, what's truly scary would be a world without bats. Our Facebook post reached 220,848 followers and was the most shared FWS #BatWeek post.

Social Media: 2015 is coming to an end, and we're looking over our regional analytics. Tallying up the Facebook followers from all of our Facebook pages we went from 38,502 followers in 2014 to 71,836 in 2015! This is a direct reflection of the amazing work being done by our social media managers in the field. ♦

Proposed BP-Deepwater Horizon oil spill settlement largest in U.S. history

By Nanciann Regalado, Natural Resources Damage Assessment

On October 5, U.S. Attorney General Loretta Lynch, announced a “major step forward in our effort to deliver justice to the Gulf region.” Flanked by four Cabinet-level leaders, Lynch explained, “We have secured an historic resolution of our pending claims against BP, totaling more than \$20 billion and making it the largest settlement against any entity in American history.” BP was the party primarily responsible for 2010’s Deepwater Horizon oil spill, the largest environmental disaster in U.S. history.

If approved by a federal judge, Lynch said the settlement agreement would end a long and arduous legal journey that brought the U.S. Department of Justice together with five Gulf states and four federal agencies to make BP pay penalties for Clean Water Act violations and damages for injuries to natural resources.

While a “major step forward,” Lynch said much work remains. The 350-page written agreement known as the consent decree is a proposed agreement; it will be finalized only after Justice considers all public comments received before the December 4 deadline.

\$5.5 billion provided for RESTORE Act projects

The \$20 billion total agreed to by BP includes a \$5.5 billion penalty under the Clean Water Act. In accordance with the RESTORE Act of 2012, which set up a framework for restoring the ecosystem and economy of the Gulf Coast region, 80 percent of these funds will go to environmental restoration, economic recovery projects, and tourism and seafood promotion in Florida, Alabama, Mississippi, Louisiana and Texas. ♦

For more information visit:

www.justice.gov/enrd/deepwater-horizon

Grand Bay NWR projects among those funded by National Fish & Wildlife Foundation to Enhance Conservation Efforts on Gulf Coast refuges

By Nadine Siak, Gulf Restoration Program

The National Fish and Wildlife Foundation (NFWF) announced it is awarding more than \$80 million from its Gulf Environmental Benefit Fund (GEBF) to 22 projects designed to benefit natural resources that were impacted by the 2010 Deepwater Horizon oil spill in the Gulf of Mexico. Eight of these new projects will be implemented either in or near National Wildlife Refuges managed by the Service. Altogether, these projects will receive approximately \$20 million from the GEBF in this round of funding. The newly funded efforts will further the National Wildlife Refuge System’s mission to conserve, manage and restore the fish, wildlife, plant and habitat resources of the United States for the benefit of present and future generations of Americans.

“The Service’s Southeast and Southwest Regional staff members have been working closely with the five Gulf states and National Fish and Wildlife Foundation to design and develop projects that will achieve meaningful restoration and conservation outcomes for our shared fish and wildlife goals in the Gulf of Mexico region,” said Linda Walker, who leads the Service’s Gulf Restoration Program. “We are confident that through these collaborative efforts, projects receiving funding from the National Fish and Wildlife Foundation’s Gulf Environmental Benefit Fund will advance the health and resiliency of Gulf natural resources and the coastal communities that enjoy and depend on them.”

A new GEBF-supported project in Alabama targeting the acquisition of 647 acres of priority coastal habitat will complement the conservation benefits provided by the Grand Bay National Wildlife Refuge. In Mississippi, a project focused on enhancing and restoring habitat on federal lands in coastal Mississippi is expected to lead to the restoration of more than 30,000 acres contained within Grand Bay National Wildlife Refuge, Gulf Islands National Seashore and the De Soto National Forest.



Laguna Atascosa National Wildlife Refuge in Texas, photo: USFWS

In the State of Texas, two new projects being funded by the GEBF will complement existing conservation efforts within the nearby Aransas National Wildlife Refuge: one will conserve 600 acres and complete the contiguous protection of 16,100 acres of tidal marshes and flats, intermediate and brackish wetlands, wet prairies, and shorelines on San Antonio Bay; another will evaluate options for protecting and enhancing colonial waterbird rookery islands within the Matagorda Bay system. Three new projects will impact the Laguna Atascosa National Wildlife Refuge: one will increase the size of the refuge with the acquisition of 1,780-acres, and two will enhance 670 acres of wetlands and restore 36 acres of critical bird nesting islands within it. A sixth project in Texas will enhance and complete two critical colonial waterbird and coastal seabird nesting islands within the San Bernard National Wildlife Refuge.

“These projects will help ensure healthy wildlife habitats for generations to come, and provide additional opportunities for Americans to enjoy their public lands,” said David Viker, chief of the National Wildlife Refuge System for the Southeast Region.

NFWF created the GEBF two and a half years ago as the vehicle to receive and administer funds resulting from the plea agreements reached by the U.S. Department of Justice and BP and Transocean relating to the 2010 oil spill. Provisions within the agreements direct a total of \$2.544 billion to NFWF over a five-year period to be used to support projects that remedy harm to natural resources in the Gulf States. Today’s announcement represents the third obligation of funds available to support projects in the states along the Gulf of Mexico from the payments received thus far by the GEBF. To date, the fund has received \$850 million dollars, and has obligated more than \$480 million. ♦

Sewee Center's red wolf sisters move to Ashboro Zoo

By John Ptolemy, Cape Romain NWR

Cape Romain National Wildlife Refuge's staff and volunteers said goodbye to two endangered red wolves at the Sewee Visitor and Environmental Education Center on November 6. The two female siblings, fondly known as Haley and Sierra, were transferred to Asheboro Zoo, North Carolina, for pairing with male wolves as part of the captive breeding program.

A male red wolf from Alligator River National Wildlife Refuge will be paired with one of the females. The male was born in captivity and was part of the cross fostering program for the wild population in North Carolina. He was placed into a wild-born litter to augment the genetics of the wild population when he was 7 to 10 days old. He enjoyed the freedoms of a wild wolf until he dispersed from his natal home range and settled in a territory that included Pocosin Lakes National Wildlife Refuge and private property. When he was about two-years-old, he was trapped by a private trapper on private property. Then, the male wolf was returned to permanent captivity at the request of the private landowner, and now he has the opportunity to contribute to the survival of the species with either Haley or Sierra.

This union with two male wolves will be the first pairing for breeding purposes for Haley and Sierra. The sisters came to the Sewee Visitor and Environmental Education Center in November 2012, from the Salisbury Zoological Park in Maryland, where they were born in 2008. Upon their arrival, they immediately displayed their strength and agility, jumping to heights that cleared the top of the fencing. This required modification of the wire overhang to ensure their containment in the enclosure. With the attention and care provided by Rob Johnson, wolf caretaker, the female wolves became less anxious, slowed their pace, and settled in to their surroundings. Hopes are high that they will quickly adjust at the Asheboro Zoo, accept their mates, and produce healthy pups in the spring.

Four red wolves remain at the Sewee Center; a breeding pair and their two male offspring that were born at the Center in April 2014. The inner gates in



Haley and Sierra, photo: Rob Johnson

the two enclosures have been opened to allow the wolves access to the front area where the public will be able to see them. We anticipate that the young males will soon remain in the front enclosure for observation and education purposes.

Currently there are 202 red wolves in 44 captive facilities across the United States and about 50 to 75 wolves in the only existing wild population in northeastern

North Carolina. With a population of less than 300 individuals, the red wolf is one of the most endangered mammals in North America. The species was listed as endangered in 1967 and, in 1973, the Service established a captive breeding program for the wolf. The first reintroduction of the Red Wolf into the wild at Alligator River National Wildlife Refuge began in 1987. ♦

Bragging Rights

Wolf Creek National Fish Hatchery at the Kentucky State Fair



The Wolf Creek National Fish Hatchery booth at the Kentucky State Fair; photo: USFWS

By Moria Painter, Wolf Creek NFH

The Kentucky State Fair dates back to 1816 and is a summer tradition for many people. They look forward to the many concerts, rides, and exhibits each August. The fair draws more than 600,000 fairgoers through the doors of the Kentucky Exposition Center in Louisville, Kentucky.

Wolf Creek National Fish Hatchery remains a staple exhibitor each year in the Center's South Wing located between the petting farm and the Kids Biz stage. This great location gives us prime reach



Fairbear, the, official Kentucky State Fair mascot, admiring a Rainbow trout raised at Wolf Creek National Fish Hatchery, photo: USFWS

to the many families and individuals attending the fair. The Wolf Creek booth is set up for 12 consecutive days; Hatchery staff members man the booth for six days providing detailed information about the hatchery, stocking throughout Kentucky, and providing Biologist in Training (BIT) environmental education material. Kids and adults love to gaze at the live rainbow, brown and brook trout on display. This year the trout also attracted the attention of Fairbear one of the official mascots of the Kentucky State Fair. The question remains was Fairbear admiring the trout for their beauty or wishing for a tasty treat. ❖

Lake sturgeon return to North Carolina

By Gary Peebles, Asheville ES Field Office

Absent for more than half a century, lake sturgeon returned to North Carolina waters this fall as seven-thousand fish were released into the French Broad River.

Lake Sturgeon are native to the Mississippi, Great Lakes, and Hudson Bay basins - a historical range sweeping from the Deep South to well into Canada. Despite the wide distribution, during the 20th century lake sturgeon declined across their range as a result of overfishing, habitat loss, dams, and pollution. The last suspected record of the fish in North Carolina is from Hot Springs in 1946. Though not on the federal endangered

species list, it's considered threatened or endangered in 19 of the 20 states in its range.

Though the more than 7,000 fish released in the river came from Edenton National Fish Hatchery in eastern North Carolina, the French Broad River is the last stop in their multi-state journey. The eggs were laid and fertilized last April in Wisconsin, then carried to the Fish and Wildlife Service's Warm Springs National Fish Hatchery in Georgia where the young fish hatched and grew for 30 days. In June, those 30-day-old fish were taken to Edenton National Fish Hatchery which



Stephen Jackson marks lake sturgeon at Edenton National Fish Hatchery, photo: USFWS

had space to grow them large enough for stocking. By the time they were put in the French Broad River, they were 7.5-inches long. ❖

Toccoa River full of trout

By Crystal Thomas, Chattahoochee Forest NFH

Trout fishing should be great in north Georgia after Chattahoochee Forest National Fish Hatchery led efforts to stock more than 1,400 beautiful Rainbow Trout into the Toccoa River for Georgia's Delayed Harvest. Others involved in the November 6, effort included the Georgia Department of Natural Resources Fisheries Division's State of Georgia Stocking Coordinator John Lee Thompson and Fishery Biologist John Damer, Blue Ridge Mountain Trout Unlimited Chapter 696, and some local fishing guides. Some of the fish were put in canoes and floated to stretches of the river that could not be accessed from the road. Other fish were transported in five gallon buckets and placed into the river. Future stockings are scheduled for the Toccoa River Delayed Harvest that began in November and goes through mid-May 2016. More information about fishing the Toccoa River Delayed Harvest in Fannin County (Trout Capitol of Georgia and home of Chattahoochee Forest National Fish Hatchery) can be found at www.gofishgeorgia.com - - north Georgia trout fishing excitement that you don't want to miss out on! ♦



Front L-R: Chattahoochee Forest National Fish Hatchery Deputy Project Leader Kelly Taylor and State of Georgia Stocking Coordinator John Lee Thompson carrying fish to the river's edge; Back: Chattahoochee Forest National Fish Hatchery Animal Caretaker Jamey Mull netting fish on truck into the buckets, photo: Ralph Artiguilere, Blue Ridge Trout Unlimited Chapter 696

Successful mussel harvest at Dale Hollow National Fish Hatchery

Dale Hollow National Fish Hatchery, Celina, Tennessee, and Tennessee Cooperative Fishery Research Unit, based at Tennessee Technological University, harvested juvenile mussels from cages suspended in Dale Hollow Lake on September 16, 2015. Sixteen cages were harvested, producing 202 Pink mucket mussels and 78 Black sandshell mussels.

The numbers of Black sandshell mussels were down from last year. The harvested mussels came from sauger host fish. The cage holding walleye host fish infested with Black sandshell glochidia did not produce a significant number of mussels. We will use small sauger exclusively next spring as host fish for the sandshell. Smaller bass also will be used as host fish for Pink mucket production in the future.

Hopefully, smaller host fish will alleviate the problem of large fish fanning and flashing against the sand substrate, forcing the sand out of the cages. If smaller host fish cannot be obtained, false bottoms will be placed on the bottom of the cages to keep the host fish up off of the substrate. The bottoms will be constructed out of galvanized wire cloth so that the transforming juvenile mussels can pass through it onto the sand substrate below.

Every year is a new learning experience requiring constant modification of techniques to increase production. All of the mussels produced are being used to help meet recovery and restoration goals for a Natural Resources Damage Assessment (NRDA) for the Ohio River Islands National Wildlife Refuge. A chemical spill which took place in 1999 severely impacted mussel, snail, and fish populations along a 20-mile segment of the river. ♦



Black sandshell (top) and Pink mucket (bottom), photo: Tennessee Technological University



Hatchery Creek Engineer Eric Dewalt of Ecogrow helps kids explore stream engineering, photo: Moria Painter, USFWS

Outdoor Eco Adventure Day

By Moria Painter, Wolf Creek NFH

Studies have proven that hands-on learning and outdoor activities help kids learn and retain what they learn more effectively. Wolf Creek National Fish Hatchery continues to provide quality hands on environmental education by hosting the Annual Outdoor Eco Adventure Day each year for every Russell County, Kentucky, fourth grader.

On a sunny day in October, 220 students were introduced to 10 different outdoor adventure stations that included fur

trappers, snakes, pollinators, geology, air quality, water quality, soils, recycling, water safety and getting down and dirty building mock streams with stream engineers and designers. These programs were presented by local and state organizations that focus on conservation and the environment.

Several stations ranked high with a number of students but, the muddy hands and smiles prove that building streams was by far the majority favorite. Each year we strive to introduce students to a wide variety of subjects that will help the teachers meet state teaching standards.

This year we added a pollinator station; teaching about the many benefits of pollinators and how each student can help pollinators in their own backyard. The students made pollinator seed balls to take home to plant; the seed mix included milkweed and many other native species that will attract pollinators.

Each teacher left at the end of the day with a class full of kids eager to engage more in outdoor learning and a tote full of useful environmental education materials including posters and books. ❖

Never tell people how to do things. Tell them what to do, and they will surprise you with their ingenuity.
-George S. Patton

Red spruce restoration

By Gary Peeples, Asheville ES Field Office

A recent afternoon found staff from the Fish and Wildlife Service and Southern Highlands Reserve bushwhacking through Pisgah National Forest collecting red spruce cones - a first step in a multi-year process to restore red spruce to areas where it was found before the extensive logging and burning at the turn of the 20th century.

The Southern Appalachians are home to the highest peaks in the eastern United States, where red spruce is a key forest tree. Unfortunately, the amount of red spruce found today is a fraction of what stood 150 years ago. These forests were decimated by logging, which was followed by intensive fires that burned the thick layer of organic material the spruce needed to re-establish themselves, allowing a northern hardwood forest, with trees like maple and birch, to expand into new areas.



Kelly Holdbrooks of Southern Highlands Reserve collects red spruce cones, photo: Gary Peeples, USFWS

The collected cones will be divided among partners who will extract the seeds and grow new trees to be planted on public lands where red spruce once grew. In addition to helping conserve red spruce trees themselves, this effort will benefit wildlife, as high-elevation conifer trees are important sources of food and shelter for a variety of animals, including the endangered Carolina northern flying squirrel. ❖

Tigers for Tigers

By John Ptolemy, Cape Romain NWR

In mid-October, college students involved in the National Tigers for Tigers Coalition came to Cape Romain in Awendaw, South Carolina, for a weekend, fall leadership conference. This group is comprised of students from universities across the nation with the tiger as the school mascot. As an estimated 3,200 tigers are left in the wild, students and supporters like the National Wildlife Refuge Association have formed this amazing coalition to work to save the tigers. Currently, they work with the U.S. Fish and Wildlife Service and the World Wide



Students attending fall leadership conference at Cape Romain, photo: Patricia Midget, USFWS

Fund for Nature-India to create a corridor between the Pench and Kanha Parks for about 120 Bengal tigers. Check out their website at www.t4tcoalition.org ❖

Balancing Nature and Commerce in Northeastern North Carolina



A Natural Resources Breakout Group inventories local assets, photo: USFWS

By Bonnie Strawser, Alligator River and Pea Island National Wildlife Refuges

The U.S. Fish and Wildlife Service, National Park Service and Albemarle Commission hosted a Balancing Nature and Commerce in Northeastern North Carolina workshop during October 12 to 14, in Plymouth, North Carolina. This gathering of more than 80 community leaders from 14 counties in northeastern North Carolina was conducted by The Conservation Fund. The individuals met to begin planning a regional ecotourism strategy to grow local economies in these resource-rich communities.

“National wildlife refuges are tremendous assets to local communities. Refuges provide great habitats which support healthy wildlife populations. These wild places and wild things attract people from all over the world. Having refuges nearby is a marketing tool that money cannot buy,” said Mike Bryant, Project Leader for the North Carolina Coastal Plain Refuge Complex. “We encourage our neighbors to market refuges as a way to boost their economies, and support the balanced growth of nature-based tourism in our region.”

The workshop capped off a 10-month planning period in which representatives of each county developed an agenda to focus on the assets and needs of the

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U.S. Fish and Wildlife Service

Balancing Nature continued...

region. Topics included natural resources, commercial assets, cultural strengths, infrastructure needs, regional identity and community health.

Workshop participants were supported in their efforts by the National Wildlife Refuge Association, The Nature Conservancy, Museum of the Albemarle, North Carolina East Alliance, North Carolina Sea Grant and Domtar Paper Company, The Albemarle Commission

will take the lead in moving the initiative forward.

Senator Erica Smith-Ingram (NC-3) opened the workshop with inspiring words and support. Instruction was provided by Dr. Steve Morse, Western North Carolina University; Wit Tuttell, Visit North Carolina; John Harris, Kitty Hawk Kites; Billy Smithwick, Town of Windsor; Carol Shields, Roanoke River Partners; Mike Bryant, U.S. Fish

and Wildlife Service; Frank Miglorie, Edenton-Chowan Partnership; Meredith Hill, Pennsylvania Department of Conservation and Natural Resources; Duarte Morais, People First Tourism; Michael Twiddy, North Carolina Small Business and Technology Development Center; Mark Little, University of North Carolina's Kenan Institute of Private Enterprise; Dan Gerlach, Golden LEAF Foundation; and Rick Larson, Natural Capital Investment Fund. ♦

Seabird Monitoring Project in Culebra NWR

By Gisella Burgos, Caribbean NWR Complex

For the second year in a row, Culebra's refuge staff partnered with Effective Environmental Restoration to survey seabirds using the refuge. Sooty terns nest on the island of Culebra. Thousands of these birds meet to court and breed on the island.

During this year, the sooty tern population reached 39,505 pairs compared to last year where 33,140 pairs visited the island to nest. This increase in numbers show that the population maybe stable, compared to an estimate of 40, 000 pairs in 2006. (Saliva, USFWS)

Other seabirds monitored were Noddies; Bridled, Royal, Sandwich and Roseate Terns; Red-billed and White-tailed Tropicbirds; and Brown, Red-footed and Masked Boobies.

The presence of these species in the Culebra archipelago continues to make it an important place in the Caribbean for seabirds. ♦



photo: Ricardo Colón-Merced, USFWS

National Park Service Director visits Black Bayou Lake National Wildlife Refuge



Jonathan Jarvis, National Park Service Director, with North Louisiana Refuge employees, photo: USFWS

By Nova Clarke, North Louisiana Refuges Complex

On October 8, the North Louisiana Refuges hosted National Park Service Director, Jonathan Jarvis at Black Bayou Lake National Wildlife Refuge. Director Jarvis was in Monroe to give a talk about the Every Kid in a Park program, and his hosts at the University of Louisiana-Monroe, brought him out to the refuge to see what was available for children in this area. Refuge staff members escorted Director Jarvis around the refuge including the Visitor Center, Conservation Learning Center, and our Nature Trail. Although there are no National Park Service sites in the Monroe area, Black Bayou National Wildlife Refuge provides opportunities for kids to be exposed to nature through field trips and public activities. ♦

Friends and Volunteers

Cabo Rojo community revives Salt Flats Greenhouse

By Gisella Burgos, Caribbean NWR Complex

Volunteer Orlando Medina, Agriculture Extension Educator Joel Sudd, the refuge's Friends Group, and 40 community members are working to revive the refuge's greenhouse at the Salt Flats. This is part of a project with the community to promote and encourage home gardening. Plants are being grown in the Salt Flats greenhouse and later can be transplanted in family garden plots.



Volunteer Orlando Medina works in the Salt Flats greenhouse, photo: Orlando Medina

Cherry tomatoes, peppers, aloe vera, eggplant, spinach, and cilantro are among the thriving plants in the greenhouse. ♦

A space for children, built by youths



High school Senior Ryan Black assesses his progress as he installs cedar stumps and a balance beam in a new outdoor play area at Red River National Wildlife Refuge, photo: Terri Jacobson, USFWS

By David Young, Red River NWR and Ryan Black, Refuge Volunteer

In an ongoing effort to connect urban and suburban youth to nature and wildlife, Red River National Wildlife Refuge in Bossier City, Louisiana, is building a Nature Explore outdoor play area that provides a place for children to discover and play in nature in a safe and imaginative way. As part of his high school senior project, local student Ryan Black led the effort to build what has been casually called the "squirrel area." This collection of cedar stumps and a balance beam, part of the larger play area, is a place for children to emulate the jumpy behavior of squirrels while improving their balance and motor skills.

"I choose this project because I've grown up in and around the outdoors my whole life, and I wanted to give children in my community the opportunity to experience nature in a safe, intriguing environment," Ryan said.



Finished deck waits on new signage, photo: USFWS

Butterflies and fish have great partners

By Bill Bouthillier, Warm Springs NFH

The Benning Bass Club, Friends of the Warm Springs National Fish Hatchery, and hatchery staff members built an observation deck over the new Monarch butterfly–Pollinator garden in October. Lumber was donated by WestRock and pressure-treated by Universal Forest Products Union City, LLC free of

charge. The Benning Bass Club supplied the workers, and the Friends group supplied snacks, coffee, and water to the volunteers. The Friends group also paid for some of the building supplies. Hatchery staff members helped build the deck. For the past four years, the Benning Bass Club has worked with the hatchery on an annual environmental project. These partnerships help leverage funds and workloads to benefit both fisheries and other wildlife. ♦

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U.S. Fish and Wildlife Service

A Space for Children continued...

On two very hot fall afternoons, Ryan recruited and led a team of friends and family who helped dig, mix concrete, and haul mulch to build the squirrel area. When the first phase of the play area opened during the refuge's annual Wildlife Celebration on October 17, Ryan was there to share his work with visiting children and their parents.

"The best part of the project was being able to see the smiles of joy on the children's faces at the festival day when they were playing and jumping all over the playground," Ryan said. ❖

Wild Things 2015



Wild Things 2015, photo: USFWS

By David Stoughton, Southeast Louisiana NWRs

Wild Things is to one of the premier National Wildlife Refuge System events. The annual open house of the Southeast Louisiana National Wildlife Refuges is held in coordination with National Wildlife Refuge Week and celebrated its 18th year with ideal temperatures and record crowds.

This year welcomed 5,500 visitors and featured more than 50 guest exhibitors hosting educational activities designed to keep the whole family active and outdoors all day.

A free event, Wild Things allows people of all ages to learn new skills, make new friends, and make lasting memories about the importance of the refuge system. The backdrop is the beautiful 110-acre property on Bayou Lacombe, headquarters of the U.S. Fish and Wildlife Service's Southeast Louisiana Refuges. Its woods, lawns, trails, and gardens provide the ideal setting.

Highlights from 50 exhibitors included wood and duck decoy carving demonstrations, bee keeping, fly fishing, fly making, and the live local animals including snakes, turtles and alligators. The St. Tammany Parish Master Gardeners maintained the butterfly garden that was bustling with beautiful flowers and active butterflies. They provided educational activities for the kids and gardening hand-outs for the adults.

The Friends of Louisiana Wildlife Refuges helped organize this massive event. The event could have only been made possible by the work of more than 100 volunteers who supported every aspect of the day. ❖

Fall fishing events abound at Wolf Creek National Fish Hatchery



Participants of the Annual Wounded Warrior Fishing event display several large striped bass, photo: Moria Painter, USFWS

By Moria Painter, Wolf Creek NFH

September is never a dull month at Wolf Creek National Fish Hatchery. Each year, Wolf Creek hosts a special Wounded Warrior Fishing Event on September 11. This year, the 22 participants of the fourth Annual Wounded Warrior Fishing Event enjoyed an early morning of guided striped bass fishing on Lake Cumberland. They also enjoyed a program from the Russell County Honor Guard and had great lunch provided by our Friends of Wolf Creek National Fish Hatchery. The afternoon culminated with trout fishing on Hatchery Creek.

The fishing events continued September 22 to 24, with our eighth Annual Catch a Smile Senior Fishing Derby and two Catch a Rainbow Special Needs Kids Fishing Derbies. We had a great turnout for all events. About 160 seniors participated this year and were treated to door prizes and lunch.

For the eighth year in a row we hosted a special needs derby for school-age kids in two surrounding counties. This year, we hosted two additional counties, bringing the total participation up to 186 students. Participants received commemorative t-shirts and medallions and were treated to a delicious lunch.

These wonderful events would not be a success without the many sponsors, volunteers, teachers and parents that help support them. With all four events we had 92 volunteers donating more than 500 hours of service. We look forward to another great year in 2016. ❖

Help the Hooch and the Chattahoochee River Watershed Festival



The Warm Springs NFH booth at the Chattahoochee Watershed Festival, photo: USFWS

By Bill Bouthillier, Warm Springs NFH

In October, during Help the Hooch Day, Warm Springs National Fish Hatchery staff members and the Friends of Warm Springs National Fish Hatchery collected about 25 pounds of trash along the Chattahoochee River in downtown Columbus, Georgia.

They also manned a booth at the Chattahoochee Watershed Festival which is the finale to Help the Hooch Day. The most popular attractions at the booth were turtle and crayfish touch tanks. Several hundred children filtered through the booth and got a chance to touch or pick up crayfish and turtles. More than 10,000 volunteers came together to help clean up trash along the banks of the Chattahoochee River and some of its tributaries. Last year volunteers removed more than 150,000 pounds of litter. ❖

Annual Hunting and Fishing Day at Tensas River

By Erin Cox, Tensas River NWR

On Saturday, September 19, more than 1,200 people braved the heat and converged on Tensas River National Wildlife Refuge for its annual Hunting and Fishing Day presented by the Tensas River Refuge Association and refuge staff members. The organizers and volunteers worked tirelessly to ensure that there were plenty of fun and educational activities to teach kids about conservation and the outdoors.



Youths participated in shooting activities including archery, BB guns, and shotguns, photo: Wanda Wallace

There were live animals, demonstrations by refuge biologists, several shooting events for kids, local artists and vendors, youth game calling contests, educational stations, and arts and crafts.

The festivities concluded with drawings for two lottery youth deer hunts. The refuge holds two of these guided youth hunts each hunting season, with staff and approved volunteers serving as guides. These hunts not only manage deer populations within an area closed to public hunting, but more importantly provide opportunities to get kids excited about hunting, conservation, and our National Wildlife Refuges. This year, we had more than 360 applicants from all over

Louisiana and even Texas, Arkansas, and Mississippi!

Tensas River thanks all of the attendees, volunteers, vendors, and exhibitors who contributed to Hunting and Fishing Day's success. Also, the generosity of amazing sponsors like Tensas State Bank, Cross Keys Bank, Southland Safety, louisianabowhunter.com, the Southwest Louisiana chapter of the Quality Deer Management Association, Double B Logging, Finishing Touch, the West Monroe Bulldogs, and many others allowed this event to be free for the public. We are looking forward to next year and hope to see everyone again on Saturday, September 17, 2016! ❖

Volunteers help beautify Sewee Center

By John Ptolemy, Cape Romain NWR

On Saturday, September 26, 84 enthusiastic volunteers at the Cape Romain's Sewee Center in Awendaw, South Carolina, worked to improve the refuge's gardens of pollinating plants. They also focused on the bee apiary and on restoring the butterfly and perimeter gardens to create a vibrant welcome for the public when they visit our center. Thank you to the Girl Guides, Boy Scouts and the Charleston Community Bee Garden Group for supporting our successful day.



Bee apiary, photo: John Ptolemy, USFWS



Butterfly Garden, photo: John Ptolemy, USFWS

Warm Springs National Fish Hatchery's Annual Open House

By: Bill Bouthillier, Warm Springs NFH

Warm Spring National Fish Hatchery's Annual Open House was held Saturday, October 10th. It featured exhibits and demonstrations from all of the hatchery's programs. Staff members and members of the Friends of Warm Springs National Fish Hatchery cooked hot dogs and provided bottled water to the attendees.

The food and water was donated by the Friends Group. More than 225 visitors were on hand to view the exhibits and to chat with staff members from the entire Warm Springs Fisheries Complex: Warm Springs National Fish Hatchery, Warm Springs Fish Health Lab and Fish Technology Centers. Children who attended the open house had chances of winning door prizes for getting their passports stamped at each station and playing the pollinator game at the kid's activity table.

This year, we were honored to host a few members of Outdoor Afro. Outdoor Afro is a community that reconnects African-Americans with natural spaces and one another through recreational activities, such as camping, hiking, biking, birding, fishing, gardening, and skiing. Outdoor Afro uses social media to create interest communities, events, and to partner with regional and national organizations that support diverse participation in the great outdoors. ❖



photo: Jackie Orsulak



Bear cubs tour Alligator River National Wildlife Refuge.



Happy Holidays